

Serial No. 09/736,795

REMARKS

Claims 1-40 were previously pending in the above-referenced application. Claims 5, 23, and 27 have been canceled without prejudice or disclaimer.

Claim Amendments

It is respectfully submitted that none of the amendments presented herein introduces new matter into the above-referenced application. Entry of the amendments is, accordingly, respectfully requested, as is examination of the claims, as amended.

Terminal Disclaimer

A terminal disclaimer and the appropriate fee are being filed herewith, pursuant to 37 C.F.R. 1.321 § (b) and (c) to obviate an obviousness-type double patenting rejection of claims 1-40 of the above-referenced application over various claims of U.S. Patent 6,245,594. As a terminal disclaimer is being filed merely to obviate an obviousness-type double patenting rejection, thereby expediting prosecution of the above-referenced application and avoiding further expenses and time delay, filing of the terminal disclaimer should not be construed as acquiescence of the obviousness-type double patenting rejection.

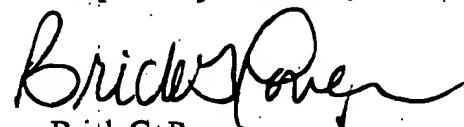
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CONCLUSION

It is respectfully submitted that each of claims 1-4, 6-22, 24-26, and 28-40 is allowable.

An early notice of the allowability of each of these claims is respectfully solicited, as is an indication that the above-referenced application has been passed for issuance. If any issues preventing the allowance of any of claims 1-4, 6-22, 24-26, and 28-40 remain which might be resolved by way of a telephone conference, the Office is kindly invited to contact the undersigned attorney.

Respectfully submitted,



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Date: May 1, 2002

Enclosure: **VERSION WITH MARKINGS TO SHOW CHANGES MADE**

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VERSION WITH MARKINGS TO SHOW CHANGES MADE ✓

IN THE CLAIMS:

Please amend the claims as follows:

1. (Twice amended) A method of disposing a conductive structure on at least one contact pad on an active surface of a semiconductor device substrate, comprising:
disposing a layer [of] comprising polymeric material over the substrate;
[altering a surface of] imparting said layer [of material to impart said layer] with a thickness [corresponding approximately] substantially equal to a desired height of the conductive structure;
forming at least one aperture through said layer to expose at least a portion of the at least one contact pad;
disposing a quantity of conductive material on said layer and permitting said conductive material to substantially fill said at least one aperture;
bonding said conductive material within said aperture to the at least one contact pad to form a conductive structure of substantially said desired height; and
at least partially exposing a lateral periphery of the conductive structure through said layer.

6. (Twice amended) The method of claim 1, wherein said disposing said layer comprises placing a quantity of polymeric material on the substrate and wherein said [altering said surface] imparting comprises spreading said polymeric material to a substantially consistent thickness over at least a portion of a surface of the substrate.

10. (Twice amended) The method of claim 1, wherein said at least partially exposing said lateral periphery of the conductive structure comprises substantially removing said layer from the substrate.

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13. (Amended) The method of claim 1, wherein said at least partially exposing said lateral periphery of the conductive structure comprises reducing said thickness of said layer.

17. (Twice amended) The method of claim 1, wherein said at least partially exposing said lateral periphery comprises exposing said layer to a solvent.

22. (Twice amended) A method of forming a solder mask, comprising:
disposing a [nonmetallic] solder mask material comprising a polymer onto an active surface of a substrate;
forming a layer of said solder mask material having a substantially consistent thickness on the active surface of said substrate[;
altering a surface of said layer to impart said layer with a] said thickness [corresponding] of said layer being substantially equal to a desired conductive structure height; and
forming at least one aperture through said layer in a location corresponding to a location of at least one contact pad of said substrate to expose said at least one contact pad through said solder mask, said solder mask material facilitating a reduction in said thickness when a conductive structure has been at least partially formed in said at least one aperture.

25. (Twice amended) The method of claim 23, wherein said [altering said surface of] forming said layer comprises planarizing said layer.

28. (Amended) The method of claim [27] 22, wherein said forming said layer comprises softening or melting said [polymeric] solder mask material.

29. (Twice amended) The method of claim 28, wherein said [altering said surface] forming said layer comprises spinning said [polymeric] solder mask material over said active surface.

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30. (Twice amended) The method of claim 28, wherein said [altering said surface] forming said layer comprises spreading said [polymeric] solder mask material across said active surface.

33. (Amended) A method of exposing at least a portion of a lateral periphery of a conductive structure on a semiconductor device, comprising reducing a thickness of a solder mask that comprises polymeric material disposed around said lateral periphery.

36. (Amended) A method of exposing a conductive structure that protrudes from a surface of a semiconductor device through a solder mask that comprises a polymeric material positioned on the surface of the semiconductor device, comprising:
reducing a thickness of least portions of the solder mask laterally surrounding the conductive structures.